RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10/580,556	
Source:	IFWP.	
Date Processed by STIC:	06/09/2006	

ENTERED



IFWP

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/580,556

DATE: 06/07/2006
TIME: 10:55:32

Input Set : A:\Sequence Listing_4240-142.ST25.txt

Output Set: N:\CRF4\06072006\J580556.raw

```
3 <110> APPLICANT: Korea Advanced Institute of Science and Technology
             LEE, Sang Yup
             LEE, Sang Jun
      7 <120> TITLE OF INVENTION: NOVEL RUMEN BACTERIA VARIANTS AND PROCESS FOR PREPARING
SUCCINIC
             ACID EMPLOYING THE SAME
     10 <130> FILE REFERENCE: 4240-142
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/580,556
     13 <141> CURRENT FILING DATE: 2006-05-26
     15 <150> PRIOR APPLICATION NUMBER: PCT/KR2004/001210
     16 <151> PRIOR FILING DATE: 2004-05-20
     18 <150> PRIOR APPLICATION NUMBER: KR 10-2003-0084934
     19 <151> PRIOR FILING DATE: 2003-11-27
     21 <150> PRIOR APPLICATION NUMBER: KR 10-2004-0028105
     22 <151> PRIOR FILING DATE: 2004-04-23
     24 <160> NUMBER OF SEQ ID NOS: 37
     26 <170> SOFTWARE: PatentIn version 3.3
     28 <210> SEQ ID NO: 1
     29 <211> LENGTH: 30
     30 <212> TYPE: DNA
     31 <213> ORGANISM: Artificial
     33 <220> FEATURE:
     34 <223> OTHER INFORMATION: Primer LS1
     36 <400> SEQUENCE: 1
                                                                                30
     37 cagtgaagga gctccgtaac gcatccgccg
     40 <210> SEQ ID NO: 2
     41 <211> LENGTH: 30
     42 <212> TYPE: DNA
     43 <213> ORGANISM: Artificial
     45 <220> FEATURE:
     46 <223> OTHER INFORMATION: Primer LP1
     48 <400> SEQUENCE: 2
     49 ctttatcgaa tctgcaggcg gtttccaaaa
                                                                                30
     52 <210> SEO ID NO: 3
    53 <211> LENGTH: 30
     54 <212> TYPE: DNA
     55 <213> ORGANISM: Artificial
     57 <220> FEATURE:
     58 <223> OTHER INFORMATION: Primer LP2
    60 <400> SEQUENCE: 3
                                                                                30
    61 gtactgtaaa ctgcagcttt catagttagc
    64 <210> SEQ ID NO: 4
    65 <211> LENGTH: 30
    66 <212> TYPE: DNA
```

. . . .

Input Set : A:\Sequence Listing 4240-142.ST25.txt

Output Set: N:\CRF4\06072006\J580556.raw

67 <213> ORGANISM: Artificial 69 <220> FEATURE: 70 <223> OTHER INFORMATION: Primer LH2 72 <400> SEQUENCE: 4 30 73 gccgaaagtc aagcttgccg tcgtttagtg 76 <210> SEQ ID NO: 5 77 <211> LENGTH: 10 78 <212> TYPE: DNA 79 <213> ORGANISM: Artificial 81 <220> FEATURE: 82 <223> OTHER INFORMATION: Linker 1 84 <400> SEQUENCE: 5 10 85 tctagaagct 88 <210> SEQ ID NO: 6 89 <211> LENGTH: 29 90 <212> TYPE: DNA 91 <213> ORGANISM: Artificial 93 <220> FEATURE: 94 <223> OTHER INFORMATION: Primer SXF 96 <400> SEQUENCE: 6 29 97 gctctagacc ttctatcgcc ttcttgacg 100 <210> SEQ ID NO: 7 101 <211> LENGTH: 29 102 <212> TYPE: DNA 103 <213> ORGANISM: Artificial 105 <220> FEATURE: 106 <223> OTHER INFORMATION: Primer SXR 108 <400> SEQUENCE: 7 29 109 gctctagagg ctacaaaatc acgggcgtc 112 <210> SEQ ID NO: 8 113 <211> LENGTH: 30 114 <212> TYPE: DNA 115 <213> ORGANISM: Artificial 117 <220> FEATURE: 118 <223> OTHER INFORMATION: Primer SBG 120 <400> SEQUENCE: 8 30 121 ageggatece ettetatege ettettgaeg 124 <210> SEQ ID NO: 9 125 <211> LENGTH: 30 126 <212> TYPE: DNA 127 <213> ORGANISM: Artificial 129 <220> FEATURE: 130 <223> OTHER INFORMATION: Primer SPR 132 <400> SEQUENCE: 9 30 133 gtcctgcagg gctacaaaat cacgggcgtc 136 <210> SEQ ID NO: 10 137 <211> LENGTH: 30 138 <212> TYPE: DNA 139 <213> ORGANISM: Artificial

Input Set : A:\Sequence Listing_4240-142.ST25.txt

Output Set: N:\CRF4\06072006\J580556.raw

•

	<220> FEATURE:	
	<223> OTHER INFORMATION: Primer PB1	
	<400> SEQUENCE: 10	2.0
	catggcggat ccaggtacgc tgatttcgat	30
	<210> SEQ ID NO: 11	
	<211> LENGTH: 30	
	<212> TYPE: DNA	
	<213> ORGANISM: Artificial	
	<220> FEATURE:	
	<223> OTHER INFORMATION: Primer PB2	
	<400> SEQUENCE: 11	
	caaggatcca acggataaag cttttattat	30
	<210> SEQ ID NO: 12	
161	<211> LENGTH: 30	
	<212> TYPE: DNA	
	<213> ORGANISM: Artificial	
	<220> FEATURE:	
166	<223> OTHER INFORMATION: Primer CTR	
	<400> SEQUENCE: 12	
	ctcgagcccg gggtttaagg gcaccaataa	30
	<210> SEQ ID NO: 13	
	<211> LENGTH: 30	
	<212> TYPE: DNA	
	<213> ORGANISM: Artificial	
	<220> FEATURE:	
	<223> OTHER INFORMATION: Primer CTF	
	<400> SEQUENCE: 13	
	ctcgagcccc gggctttgcg ccgaataaat	30
	<210> SEQ ID NO: 14	
	<211> LENGTH: 22	
	<212> TYPE: DNA	
	<213> ORGANISM: Artificial	
	<220> FEATURE:	
	<223> OTHER INFORMATION: Primer KM1	
	<400> SEQUENCE: 14	00
	gacgtttccc gttgaatatg gc	22
	<210> SEQ ID NO: 15	
	<211> LENGTH: 24	
	<212> TYPE: DNA	
	<213> ORGANISM: Artificial	
	<220> FEATURE:	
	<223> OTHER INFORMATION: Primer LU1	
	<400> SEQUENCE: 15	
	cattgaggcg tattatcagg aaac	24
	<210> SEQ ID NO: 16	
	<211> LENGTH: 23	
	<212> TYPE: DNA	
	<213> ORGANISM: Artificial	
213	<220> FEATURE:	

Input Set : A:\Sequence Listing 4240-142.ST25.txt

Output Set: N:\CRF4\06072006\J580556.raw

•

214 <223> OTHER INFORMATION: Primer KM2 216 <400> SEQUENCE: 16 217 gcagtttcat ttgatgctcg atg 23 220 <210> SEQ ID NO: 17 221 <211> LENGTH: 24 222 <212> TYPE: DNA 223 <213> ORGANISM: Artificial 225 <220> FEATURE: 226 <223> OTHER INFORMATION: Primer LD2 228 <400> SEQUENCE: 17 24 229 cctcttacga tgacgcatct ttcc 232 <210> SEQ ID NO: 18 233 <211> LENGTH: 30 234 <212> TYPE: DNA 235 <213> ORGANISM: Artificial 237 <220> FEATURE: 238 <223> OTHER INFORMATION: Primer CM1 240 <400> SEQUENCE: 18 30 241 ggtggtatat ccagtgattt ttttctccat 244 <210> SEQ ID NO: 19 245 <211> LENGTH: 28 246 <212> TYPE: DNA 247 <213> ORGANISM: Artificial 249 <220> FEATURE: 250 <223> OTHER INFORMATION: Primer PU1 252 <400> SEQUENCE: 19 28 253 ctttgcaaca ttatggtatg tattgccg 256 <210> SEQ ID NO: 20 257 <211> LENGTH: 30 258 <212> TYPE: DNA 259 <213> ORGANISM: Artificial 261 <220> FEATURE: 262 <223> OTHER INFORMATION: Primer CM2 264 <400> SEQUENCE: 20 30 265 tactgcgatg agtggcaggg cggggcgtaa 268 <210> SEQ ID NO: 21 269 <211> LENGTH: 26 270 <212> TYPE: DNA 271 <213> ORGANISM: Artificial 273 <220> FEATURE: 274 <223> OTHER INFORMATION: Primer PD2 276 <400> SEQUENCE: 21 26 277 ccccagcatg tgcaaatctt cgtcac 280 <210> SEQ ID NO: 22 281 <211> LENGTH: 32 282 <212> TYPE: DNA 283 <213> ORGANISM: Artificial 285 <220> FEATURE: 286 <223> OTHER INFORMATION: Primer

Input Set : A:\Sequence Listing_4240-142.ST25.txt

Output Set: N:\CRF4\06072006\J580556.raw

• • • •

288	<400> SEQUENCE: 22	
289	gctctagata tccgcagtat cactttctgc gc	32
292	<210> SEQ ID NO: 23	
293	<211> LENGTH: 30	
	<212> TYPE: DNA	
295	<213> ORGANISM: Artificial	
297	<220> FEATURE:	
298	<223> OTHER INFORMATION: Primer	
300	<400> SEQUENCE: 23	
301	tccgcagtcg gatccgggtt aaccgcacag	30
304	<210> SEQ ID NO: 24	
305	<211> LENGTH: 39	
306	<212> TYPE: DNA	
307	<213> ORGANISM: Artificial	
309	<220> FEATURE:	
310	<223> OTHER INFORMATION: Primer	
	<400> SEQUENCE: 24	
	ggggagctcg ctaacttagc ttctaaaggc catgtttcc	39
	<210> SEQ ID NO: 25	
317	<211> LENGTH: 32	
	<212> TYPE: DNA	
	<213> ORGANISM: Artificial	
	<220> FEATURE:	
	<223> OTHER INFORMATION: Primer	
	<400> SEQUENCE: 25	
	gctctagata tccgggtcaa tatcgccgca ac	32
	<210> SEQ ID NO: 26	
	<211> LENGTH: 30	
	<212> TYPE: DNA	
	<213> ORGANISM: Artificial	
	<220> FEATURE:	
	<223> OTHER INFORMATION: Primer	
	<400> SEQUENCE: 26	20
	gaattcgagc tcgcccgggg atcgatcctc	30
	<210> SEQ ID NO: 27	
-	<211> LENGTH: 36	
	<212> TYPE: DNA	
	<213> ORGANISM: Artificial	
	<pre><220> FEATURE: <223> OTHER INFORMATION: Primer</pre>	
	<400> SEQUENCE: 27	26
	cccgggccga caggctttga agcatgcaaa tgtcac	36
	<210> SEQ ID NO: 28 <211> LENGTH: 32	
	<211> LENGTH: 32 <212> TYPE: DNA	
	<212> TYPE: DNA <213> ORGANISM: Artificial	
	<213> ORGANISM: AFTIFICIAL <220> FEATURE:	
	<pre><220> FEATORE: <223> OTHER INFORMATION: Primer</pre>	
	<223> OTHER INFORMATION: PITMET <400> SEQUENCE: 28	
200	(400) DEQUENCE: 20	

Input Set : A:\Sequence Listing_4240-142.ST25.txt

Output Set: N:\CRF4\06072006\J580556.raw

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27 Seq#:28,29,30,31,32,33,34,35,36,37

VERIFICATION SUMMARY

• • • • •

DATE: 06/07/2006 TIME: 10:55:33

Input Set : A:\Sequence Listing_4240-142.ST25.txt

Output Set: N:\CRF4\06072006\J580556.raw

PATENT APPLICATION: US/10/580,556

L:12 M:270 C: Current Application Number differs, Replaced Current Application Number